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MARKET ACCESS SECRETARIAT
Global Analysis Report

Health and Wellness Series

Pea Protein Isolate
in Food and Beverage Products

August 2016

EXECUTIVE SUMMARY

Globally, there were 170 products containing pea protein isolate launched between January 2011 and December 2015: 143 in the food category, and 36 in the drink category.

With 61 products, the United States saw the largest number of new food products containing pea protein isolates launched during the review period (January 2011 to December 2015). It also had the most new drink products containing pea protein isolates (17).

The most common claims used for products containing pea protein isolate in food and beverage products fell under the "suitable for" category (i.e. low/no/reduced allergens, gluten-free, no animal ingredients, etc.).

The Canadian company, Daiya Foods, was a leader in launching products with pea protein isolate over the past five years, with 13 products in the United States and 5 products in Canada.

CONTENTS

Executive Summary 1
New Products Containing Pea Protein Isolate 2
Top Companies 3
Health Claims 4
In the Last Three Months 5
New Product Examples 6
Market Size 8
Conclusion 9
For More Information 9
Resources 10

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NEW PRODUCTS CONTAINING PEA PROTEIN ISOLATE

From January 2011 to December 2015, there were 170 new products launched globally that contained pea protein isolate. The United States (U.S.) saw the most new product launches, with a total of 78. Most of the country's products were snack/cereal/energy bars, meal replacement beverages, or meat substitute products.

With the majority of its products in the processed poultry, processed cheese, and snack/cereal/energy bar subcategories, Canada had the second largest amount of new products containing pea protein isolate. Ten products containing pea protein isolate were introduced in Brazil, most of which were meal replacement beverage products. The United Kingdom (U.K.) had a total of 10 new products with pea protein isolate, with the majority being meal replacement beverage products, bread products, or snack/cereal/energy bars. Italy ranked fifth in product launches, with seven products, including three processed fish/meat/egg products, two hors d'oeuvres, one savoury biscuit/cracker product, and one meal replacement beverage product.

New Products with Pea Protein Isolate by Top Five Markets and Category, from January 2011 to December 2015

Country	Product Category	Number of Products
Total Products		**170**
United States - 78	Food	61
	Drink	17
Canada - 32	Food	31
	Drink	1
Brazil - 10	Drink	9
	Food	1
United Kingdom - 10	Drink	5
	Food	5
Italy - 7	Food	6
	Drink	1
Other Countries - 33	Food	30
	Drink	3

Source: Mintel, 2016.

Over the past five years, the market for products containing pea protein isolate has been increasing, reaching 64 products in 2015.

New Packaged Food and Beverage Products with Pea Protein Isolate by Top 5 Markets, from January 2011 to December 2015

Country	2011	2012	2013	2014	2015	Total
United States	5	4	18	24	27	78
Canada	0	2	8	7	15	32
Brazil	0	0	1	0	9	10
United Kingdom	2	1	0	3	4	10
Italy	0	0	2	3	2	7
Other Countries	5	5	6	10	7	33
Total	12	12	35	47	64	170

Source: Mintel, 2016.

From January 2011 to December 2015, the four main subcategories included snacks, processed fish/meat/egg products, other beverages, and side dishes.

- Within snacks, 30 products were snack/cereal/energy bars, six bean-based snacks, five were vegetable snacks, two were corn-based snacks, and two were hors d'oeuvres.
- Within the processed fish/meat/egg products subcategory, 17 were meat substitutes, 13 were poultry products, three were meat products, and two were fish products.
- Within the other beverages subcategory, all were meal replacement beverages.
- Within side dishes, all were pasta side dishes.

New Packaged Food and Beverage Products with Pea Protein Isolate in the World By Subcategories, From January 2011 to December 2015

Product Subcategory	Number of Products
Snacks	45
Other Beverages	35
Processed Fish/Meat/Egg Products	35
Side Dishes	15
Dairy	14
Bakery	8
Desserts and Ice Cream	7
Meals and Meal Centres	7
Breakfast Cereals	1
Sauces and Seasonings	1
Savoury Spreads	1
Sports and Energy Drinks	1

Source: Mintel, 2016.

TOP COMPANIES

The Canada-based company, Daiya Foods, was a leader in launching products with pea protein isolate, with a total of 18 products launched from January 2011 to December 2015. Most of their products belong to the dairy category, with 13 processed cheese products, but they also launched five frozen desert products.

The Italian company, Dr. Schär, had the second largest number of launches with 13 products, all of which were pasta. Their products are sold in Turkey, Spain, France, Norway, Russia, Mexico, Peru, and Egypt.

Beyond Meat (U.S.) launched six new products containing pea protein isolate during the review period (January 2011 to December 2015). All of their products were meat substitutes.

The British company, Pulsin', launched six new products containing pea protein isolate, all of which were protein snack bars. These products were sold in Finland, Germany, the Netherlands, the U.K., and South Africa.

The Good Bean (U.S.) had six new products containing pea protein isolate, all of which were bean-based snacks. Their products are mostly sold in the U.S., with the exception of one product which can be found in Canada.

Top Companies and Number of Products Containing Pea Protein Isolate Found in Each of the Top Five Markets, from January 2011 to December 2015

Country	Company	Number of Products
United States	Daiya Foods (Canada)	13
	Beyond Meat (USA)	6
	Kind (USA)	5
	The Good Bean (USA)	5
	Health Warrior (USA)	4
	Lightlife Foods (USA)	4
Canada	Daiya Foods (Canada)	5
	Loblaws (Canada)	4
	M&M Meat Shops (Canada)	4
	Pinty's Delicious Foods (Canada)	4
	Genuine Health (Canada)	3
	Olymel (Canada)	3
Brazil	Codap (Brazil)	3
	Danone (Brazil)	3
	Renk's Industrial (Brazil)	3
	Danone (Brazil)	2
	Nutricia (Netherlands)	2
United Kingdom	Boulder Brands (UK)	2
	GlaxoSmithKline (UK)	2
	Superdrug (UK)	2
	International Natural Products (Switzerland)	1
	Nature Valley (UK)	1
Italy	Padoa (Italy)	5
	Enervit (Italy)	1
	Nestlé (Italy)	1

Source: Mintel, 2016.

HEALTH CLAIMS

Of the products including a "low/no/reduced allergen" claim, 27 were snack/cereal/energy bars, 24 were meal replacement beverages, 14 were pasta products, 13 were poultry products, 13 were processed cheeses, 12 were meat substitutes, six were bean-based snacks, five were frozen desserts, five were bread products, five were vegetable snacks, two were dessert toppings, one was a rice/nut/grain/seed based drink, one was a prepared meal, one was an energy drink, and one was a meat product. The U.S. launched the most products that included this claim, with 62 new products from January 2011 to December 2015, followed by Canada, with 26 products launched during this same period.

Most products containing pea protein isolate with the "no animal ingredients" and "gluten-free" claims were in the snacks, processed fish/meat/eggs products, and meal replacement beverage products subcategories. The U.S. launched the most products with the "no animal ingredients" claim with 47 product launches, followed by Canada with 12.

New Packaged Food and Beverage Products with Pea Protein Isolate by Top 20 Claims, from January 2011 to December 2015

Claims	Number of Products
Low/No/Reduced Allergen	130
Gluten-Free	124
No Animal Ingredients	74
Vegan	73
GMO-Free	65
Kosher	46
Low/No/Reduced Lactose	45
No Additives/Preservatives	41
High Protein	40
Low/No/Reduced Cholesterol	34
Ease of Use	26
Environmentally Friendly Package	23
Vegetarian	22
Environmentally Friendly Product	21
High/Added Fiber	21
Microwaveable	19
All Natural Product	18
Low/No/Reduced Sugar	16
Positioning – Social Media	15
Low/No/Reduced Glycemic	14

Source: Mintel, 2016.

IN THE LAST THREE MONTHS (January 1, 2016 to March 31, 2016)

It appears that the use of pea protein isolate in food and beverage products has increased significantly in recent months. With 47 new products containing pea protein isolate, the last three months represents the equivalent to 27.6% of the total number of products launched over the past five years.

Twenty-two of these products were snacks: including 13 snack/cereal/energy bars; four potato snacks; three bean-based snacks, and two wheat and other grain-based snacks. There were also seven meals/meal centres, four dairy products, three bakery products, three processed fish/meat/egg products, three meal replacement beverages, two dessert/ice cream products, two side dishes, and one iced coffee beverage.

Most of the products were launched in the U.S., with 18 new product launches, followed by Canada (16), Brazil (4), and Germany (4). The low/no/reduced allergen claim was on 70% of the new products launched within the past three months, while the gluten-free claim was found on 62% of products, and the kosher claim was on 51% of products.

NEW PRODUCT EXAMPLES

Double Chocolate Cookie
Company: Lenny & Larry's
Brand: Lenny & Larry's The Complete Cookie
Category: Bakery
Sub-Category: Sweet Biscuits/Cookies
Country: USA
Launch Type: New Packaging
Price in US Dollars: 5.78
Claims: Ethical - Environmentally Friendly Product, GMO-Free, Kosher, Low/No/Reduced Allergen, Low/No/Reduced Cholesterol, Low/No/Reduced Sugar, Low/No/Reduced Transfat, No Animal Ingredients, Social Media, Vegan, Vegetarian

Product Description: Lenny & Larry's The Complete Cookie Double Chocolate Cookie has been repackaged in a newly designed 16-oz. pack containing 4 x 4-oz. cookies and bearing Facebook, Twitter and Instagram links. The fresh baked product which contains 16g protein per cookie is suitable for vegans and free from GMO, dairy, eggs and soy. It is kosher certified and contains no high fructose corn syrup, cholesterol, trans fat, artificial sweeteners or sugar alcohols. These cookies are made with sustainable palm oil and contain 8g of fiber per unit.

Plain Dairy Free Probiotic Cultured Flaxmilk Beverage
Company: Good Karma Foods
Brand: Good Karma
Category: Dairy
Sub-Category: Rice/Nut/Grains & Seed Based Drinks
Country: USA
Launch Type: New Variety/Range Extension
Price in US Dollars: 3.50
Claims: Digestive (Functional), GMO-Free, Gluten-Free, Kosher, Low/No/Reduced Allergen, Low/No/Reduced Lactose, No Additives/Preservatives

Product Description: Good Karma Plain Dairy Free Probiotic Cultured Flaxmilk Beverage is rich in calcium and vitamin D and contains 5g plant protein and 1200mg omega-3 per serving. This rich and creamy beverage features seven live and active cultures and beneficial bacteria. The product retails in a 32-fl. oz. bottle.

Medium Cheddar Style Farmhouse Block
Company: Daiya Foods (Canada)
Brand: Daiya
Category: Dairy
Sub-Category: Processed Cheese
Country: Canada
Launch Type: New Packaging
Price in US Dollars: 6.99
Claims: Convenient Packaging, Ethical - Environmentally Friendly Package, Gluten-Free, Kosher, Low/No/Reduced Allergen, Low/No/Reduced Cholesterol, No Animal Ingredients, Vegan

Product Description: Daiya Medium Cheddar Style Farmhouse Block has been repackaged. The kosher certified, artisan product is free from gluten, dairy, soy, casein and cholesterol, has been artfully crafted, and is suitable for vegans. It retails in a newly designed, easy open 200g pack made with 65% less packaging.

Vegetarian Indian Curry with Beyond Chicken
Company: General Mills
Brand: Beyond Meat
Category: Meals and Meal Centers
Sub-Category: Prepared Meals
Country: USA
Launch Type: New Product
Price in US Dollars: 5.69
Claims: Beauty Benefits, Ethical - Animal, Ethical - Environmentally Friendly Package, Ethical - Environmentally Friendly Product, GMO-Free, Low/No/Reduced Allergen, Low/No/Reduced Cholesterol, Low/No/Reduced Saturated Fat, Microwaveable, No Animal Ingredients, Other (Functional), Vegan, Vegetarian

Product Description: Beyond Meat Vegetarian Indian Curry with Beyond Chicken is comprised of Beyond Chicken strips, roasted red potatoes, roasted cauliflower, green peas, lentils and red quinoa in curry sauce. This 100% vegan meal can be microwave heated, contains 21 grams plant protein, and is free of GMOs, cholesterol, saturated fat and animal fat. The animal-friendly product retails in a 10-oz. pack made of 100% recycled paperboard.

MARKET SIZE – SELECT PACKAGED FOOD AND BEVERAGE CATEGORIES FOR KEY COUNTRIES

Although no data is available regarding market size for the meal replacement beverage products category, which had the largest amount of products containing pea protein isolate over the past five years, the table below provides market size data for other popular product categories that often but do not necessarily contain products containing pea protein isolate, such as pasta, snack bars, meat substitutes, and sweet and processed meat and seafood.

With retail sales of US$2.9 billion in 2015, Italy had the largest market for pasta, but Brazil had the highest growth rate with a compound annual growth rate of 6.7% from 2010 to 2015.

The U.S. had the largest market size for snack bars, worth US$6.8 billion in 2015 as well as for meat substitutes (US$632 million), and processed meat and seafood (US$36.7 million). However, Brazil experienced the most growth in the snack bars category from 2010 to 2015, with a compound annual growth rate of 22% as well as in the processed meat and seafood category (4.1%), and Italy experienced the most growth in the meat substitute category (with a compound annual growth rate of 6.8% from 2010 to 2015).

Market Size, Retail Value Sales in US$ Millions
Packaged Food, Beverage, and Health and Wellness Products for Select Countries and Categories

Country	Category	2010	2015	2016	2020	2010-15 *CAGR	2016-20 *CAGR
United States	Pasta	2,669.9	2,761.6	2,828.4	2,875.5	0.7	0.4
	Snack Bars	5,5986.0	6,846.4	7,001.1	7,472.6	4.1	1.6
	Meat Substitutes	491.0	632.2	649.3	730.0	5.2	3.0
	Processed Meat and Seafood	30,458.1	36,690.3	37,252.7	39,875.4	3.8	1.7
Canada	Pasta	617.5	729.1	740.6	776.1	3.4	1.2
	Snack Bars	702.8	848.4	879.6	975.9	3.8	2.6
	Meat Substitutes	83.1	100.0	102.0	110.2	3.8	1.9
	Processed Meat and Seafood	4,299.3	5,067.0	5,225.0	5,781.0	3.3	2.6
Brazil	Pasta	1,216.6	1,681.9	1,720.5	1,889.3	6.7	2.4
	Snack Bars	143.0	387.0	433.2	639.4	22.0	10.2
	Meat Substitutes	-	-	-	-	-	-
	Processed Meat and Seafood	1,854.5	2,645.3	2,758.6	3,241.2	7.4	4.1
United Kingdom	Pasta	740.3	850.0	861.3	883.7	2.8	0.6
	Snack Bars	615.0	754.2	753.8	774.8	4.2	0.7
	Meat Substitutes	293.6	328.9	328.8	337.8	2.3	0.7
	Processed Meat and Seafood	11,614.7	12,351.6	12,103.3	12,034.0	1.2	-0.1
Italy	Pasta	3,124.7	2,901.8	2,878.1	2,589.5	-1.5	-2.6
	Snack Bars	167.4	166.3	166.1	166.4	-0.1	0.1
	Meat Substitutes	5.6	7.8	8.1	9.1	6.8	2.8
	Processed Meat and Seafood	12,062.4	13,893.7	13,967.2	13,640.8	2.9	-0.6

Source: Euromonitor International, 2016.
***CAGR:** compound annual growth rate
Note: This market size shows only selected countries and product categories for packaged food and beverage products with a significant number of new product launches containing pea protein isolate.

Other noteworthy product categories include "health and wellness" type baby food and hot drinks. Although "health and wellness" type baby food in Brazil only represented a value of US$596.3 million in 2015, it increased by a compound annual growth rate of 18.5% from 2010 to 2015. "Health and wellness" type hot drinks in Canada, worth US$860.2 million in 2015, increased by a compound annual growth rate of 20.3% from 2010 to 2015. Growth in this category is expected to continue at a compound annual growth rate of 15.5% from 2016 to 2020.

CONCLUSION

Over the past five years, pea protein isolate has mostly been used in meal replacement beverage products, snack/cereal/energy bars, meat substitutes, pasta, and poultry products. The most common claims found on these products have been the "suitable for" type, such as "no/low/reduced allergen" or "gluten-free".

Although the U.S. represented the largest market in most product categories, there are opportunities in markets experiencing significant growth, such as snack bars and health and wellness baby food in Brazil, and health and wellness hot drinks in Canada.

FOR MORE INFORMATION

International Trade Commissioners can provide Canadian industry with on-the-ground expertise regarding market potential, current conditions and local business contacts, and are an excellent point of contact for export advice.

- **Find a Trade Commissioner**
  www.tradecommissioner.gc.ca/eng/find-trade-contacts.jsp

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- ats-sea.agr.gc.ca

RESOURCES

Euromonitor International Database, 2016.

Mintel Global New Products Database, 2016.

PEA PROTEIN ISOLATE IN FOOD AND BEVERAGE PRODUCTS
Global Analysis Report

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